

(FILE:USPAT ENTERED AT 16:13:53 ON 06 JUN 1999)

E SINNOT, R/M

L1 1 S E16

L2 2975 S 424/195.1/CCLS

L3 146 S NDGA

L4 2975 S HSV OR HERPES OR VIRUS OR VIRAL

L5 499 S NORDIHYDRO?

L6 1586 S 568/579,626,630,631,633,700,716,700,717/CCLS

L7 4561 S L2 OR L6

L8 6 S (L7 OR L5 OR L5P) L4

E GNABRE, J/M

=> s sinnot, r/m

FILE FREQUENCY TERM

1 SINNOT, ROBERT A/M

2 SINNOT, ROBERT A/M

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58 SINNOT, ROBERT A/M

US PAT NO: 5,837,252 [IMAGE AVAILABLE]
US-CL-CURRENT: 424/195.1

L1: 1 of 1

=> s 424/195.1/ccls

L2 2975 424/195.1/CCLS

=> s ndga

L3 146 NDGA

=> s hsv or herpes or virus or viral

2299 HSV

6622 HERPES

2321 VIRUS

1429 VIRAL

=> s no dihydro?

L5 499 NORDIHYDRO?

=> s 568/579,626,630,631,633,700,716,700,717/ccls

165 568/579/CCLS

178 568/626/CCLS

208 568/630/CCLS

249 568/631/CCLS

420 568/633/CCLS

190 568/700/CCLS

281 568/716/CCLS

190 568/700/CCLS

77 568/717/CCLS

1586 568/579,626,630,631,633,700,716,700,717/CCLS

L6 ((568/579 OR 568/626 OR 568/630 OR 568/631 OR 568/633 OR

568

700 OR 568/716 OR 568/700 OR 568/717/CCLS)

=> s l2 or l6

L7 4561 L2 OR L6

=> s (l7 or l3 or l5P) L4

L8 6 (L7 OR L3 OR L5P) L4

=> d l-6

1. 5,837,252, Nov. 17, 1998, Nontoxic extract of Larrea tridentata and

method of making same, Robert A. Sinnott, et al., 424/195.1 [IMAGE

AVAILABLE]

2. 5,663,209, Sep. 2, 1997, Compounds for the suppression of HIV Tat

transactivation; Ru Chih C. Huang, et al., 514/731, 885, 934 [IMAGE

AVAILABLE]

3. 5,541,232, Jul. 30, 1996, Treatment of multidrug resistant diseases;

Stephen Howell, et al., 514/731, 727 [IMAGE AVAILABLE]

4. 5,276,060, Jan. 4, 1994, Methods of treating tumors with compositions

of catecholic butanes; Edward S. Neiss, et al., 514/731 [IMAGE AVAILABLE]

5. 5,008,294, Apr. 16, 1991, Methods of treating tumors with

butanes

compositions of catecholic butanes; Edward S. Neiss, et al., 514/731
[IMAGE AVAILABLE]6. 4,880,637, Nov. 14, 1989, Compositions of catecholic butanes with
zinc; Russell T. Jordan, 424/641; 514/731, 736, 859, 863 [IMAGE
AVAILABLE]

=> d 3,4,6 bib ab kwic

US PAT NO: 5,541,232 [IMAGE AVAILABLE] L8: 3 of 6

DATE ISSUED: Jul. 30, 1996

TITLE: Treatment of multidrug resistant diseases

INVENTOR: Stephen Howell, Del Mar, CA

Atul Khandwala, Edgeview, NJ

Om P. Sachdev, New City, NY

Charles G. Smith, Rancho Santa Fe, CA

ATTORNEY: C. Smith, Pharmaceuticals, Inc., Tarrytown, NY (U.S. corp.)

APPL NO: 08,264,740

DATE FILED: Jun. 23, 1994

ART-UNIT: 125

PRIM-EXMR: Theodore J. Criares

LEGAL-REP: Weber & Associates

US PAT NO: 5,541,232 [IMAGE AVAILABLE] L8: 3 of 6

ABSTRACT:

A method and composition for treating multidrug resistance in a mammal,
in which the composition includes NDGA or an analog of NDGA in accordance
with the following formula: #STR1# wherein R.sub.1 and R.sub.2 are
independently H, lower alkyl or lower acyl;

R.sub.3, R.sub.4, R.sub.5, and R.sub.6 are independently H or lower

alkyl;

R.sub.7, R.sub.8 and R.sub.9 are independently H, hydroxy, lower alkoxy

or lower acyloxy; and

R.sub.10, R.sub.11, R.sub.12 and R.sub.13 are independently H or lower

alkyl, in a pharmaceutically acceptable vehicle.

The method is particularly suitable for administering an antineoplastic
agent, and the composition includes the combination of NDGA, or an analog
with such an antineoplastic agent.

DETDESC:

DETD(83)

In . . . in the treatment of disorders of the skin, like psoriasis,
acne, active keratosis, skin wounds warts, bacterial infections, fungal
and **viral** infections, and solid mammalian tumors illustratively
listed in said patents. Several of these catecholic butanes have been
found to be particularly effective against human breast adenocarcinoma
including **NDGA**.. These butanes, in addition to **NDGA**.. include the
following: d1 **NDGA**.. **NDGA**.. Tetraacetate. **NDGA**..
Tetrapropionate.1,4-bis(3'-methoxy-4'-hydroxyphenyl) butane; 1,4-bis(3'-methoxy-4'-
hydroxyphenyl)-2,3-dimethyl butane; 1-(3',4'-dihydroxyphenyl)-4-(2',3',4'-
trihydroxyphenyl)-butane; 1-(3',4'-dihydroxyphenyl)-4-(3',4',5'-
trihydroxyphenyl)-butane; 1-(3',4'-dihydroxyphenyl)-4-(2',3',4'-
trihydroxyphenyl)-butane; and 1-(3',4'-dihydroxyphenyl)-4-phenyl butane.

US PAT NO: 5,276,060 [IMAGE AVAILABLE] L8: 4 of 6

DATE ISSUED: Jan. 4, 1994

TITLE: Methods of treating tumors with compositions of catecholic
butanes

INVENTOR: Edward S. Neiss, Denver, CO
Larry M. Allen, Golden, CO
Russell T. Jordan, Fort Collins, CO
ASSIGNEE: Block Chemicals, G.P., Jersey City, NJ (U.S. corp.)
APPL-NO: 07/685,609
DATE FILED: Apr 15, 1993
ART-UNIT: 183
PRIM-EXMR: John W. Rollins
LEGAL-REP: Kenyon & Kenyon

ABSTRACT: The present invention provides new compositions comprising catecholic butanes and ionic zinc. The invention also relates to pharmacologically active compositions comprising said new compositions, which are useful in the treatment of benign, premalignant and malignant solid tumors, especially those of the skin. The ionic zinc may be in the form of a zinc salt, and the preferred catecholic butane is nordihydroguaiaretic acid.

SUMMARY: Surprisingly, it has been discovered that the catecholic butane, **nordihydroguaiaretic** acid, and/or derivatives thereof as defined herein, in a pharmaceutical composition that includes ionic zinc, is

US PAT NO: 4,880,637 [IMAGE AVAILABLE] L8: 6 of 6
DATE ISSUED: Nov. 14, 1989
TITLE: Compositions of catecholic butanes with zinc
INVENTOR: Russell T. Jordan, Fort Collins, CO
ASSIGNEE: Chemex Pharmaceuticals, Inc., Denver, CO (U.S. corp.)
APPL-NO: 06/924,620
DATE FILED: Oct. 28, 1986
ART-UNIT: 183
PRIM-EXMR: John W. Rollins
LEGAL-REP: Kenyon & Kenyon

US PAT NO: 4,880,637 [IMAGE AVAILABLE] L8: 6 of 6
ABSTRACT: The present invention provides new compositions comprising catecholic butanes and ionic zinc. The invention also relates to pharmacologically active compositions comprising said new compositions, which are useful in the treatment of benign, premalignant and malignant solid tumors, especially those of the skin. The ionic zinc may be in the form of a zinc salt, and the preferred catecholic butane is nordihydroguaiaretic acid.

SUMMARY: Surprisingly, it has been discovered that the catecholic butane, **nordihydroguaiaretic** acid, and/or derivatives thereof as defined herein, in a pharmaceutical composition that includes ionic zinc, is

effective in treating benign, premalignant and malignant disorders of the skin including acne and psoriasis, in aiding in the healing of skin wounds and in alleviating bacterial, viral and fungal infections when applied to the site of the disorder. The compositions are also useful in the treatment of:

INT-CL: [6] A01N 65/00
US-CL-ISSUED: 424/195.1
US-CL-CURRENT: 424/195.1
SEARCH-FLD: 424/195.1
REF-CITED: 1. U.S. PATENT DOCUMENTS
2,373,112 4/1945 Lauter 426/546
2,382,473 5/1945 Gissel 568/729
2,644,822 7/1953 Pearl 549/435
4,765,927 8/1988 Nomura et al. 252/400.2
4,774,225 1/1988 Jordan 424/25
4,880,637 1/1989 Jordan 424/64
5,276,071 1/1993 Neiss et al. 514/731

OTHER PUBLICATIONS: The invention is also disclosed in Croosy, Bush Biology and Chemistry, 1993, 1(1), pp. 252-276.

INVENTOR: Russell T. Jordan, Fort Collins, CO
ASSIGNEE: Chemex Pharmaceuticals, Inc., Denver, CO (U.S. corp.)
APPL-NO: 08/726,686
DATE FILED: Oct. 7, 1996
ART-UNIT: 161
PRIM-EXMR: Jean C. Witz
ASST-EXMR: Susan Hanley
LEGAL-REP: David K. Benson, Steven L. Nichols

US PAT NO: 5,663,209 [IMAGE AVAILABLE] L8: 2 of 6
DATE ISSUED: Sep. 2, 1997
TITLE: Compounds for the suppression of HIV Tat transactivation
INVENTOR: Ru Chih C. Huang, Baltimore, MD
John N. Gnabre, Baltimore, MD
ASSIGNEE: The Johns Hopkins University, Baltimore, MD (U.S. corp.)
APPL-NO: 08/627,588
DATE FILED: Apr. 4, 1996
ART-UNIT: 188
PRIM-EXMR: John W. Rollins
LEGAL-REP: Cushman Darby & Cushman IP Group Pillsbury Madison & Suto LLP

US PAT NO: 5,837,252 [IMAGE AVAILABLE] L8: 1 of 6
DATE ISSUED: Nov. 17, 1998
TITLE: Nontoxic extract of *Larrea tridentata* and method of making same
INVENTOR: Robert A. Simoni, Chandler, AZ
W. Dennis Clark, Phoenix, AZ
Kenneth Frank DeBoer, Belgrade, MT
ASSIGNEE: Larzacorp, Ltd., Chandler, AZ (U.S. corp.)
APPL-NO: 08/726,686
DATE FILED: Oct. 7, 1996

ABSTRACT: A nontoxic, therapeutic agent having pharmacological activity comprising concentrated extract of *Larrea tridentata* plant material and ascorbic acid, an ascorbic acid ester, an ascorbic acid salt, butylated hydroxyanisole, butylated hydroxytoluene, hydrogen sulfide, hypophosphorous acid, monothio glycerol, potassium bisulfite, propyl

INT-CL: [6] A01N 65/00
US-CL-ISSUED: 424/195.1
US-CL-CURRENT: 424/195.1
SEARCH-FLD: 424/195.1
REF-CITED: 1. U.S. PATENT DOCUMENTS
2,373,112 4/1945 Lauter 426/546
2,382,473 5/1945 Gissel 568/729
2,644,822 7/1953 Pearl 549/435
4,765,927 8/1988 Nomura et al. 252/400.2
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8 Claims, 5 Drawing Figures

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FILE	FREQUENCY TERM
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E2	*****
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